

ABSTRACT

**PERPENDICULAR MAGNETIC HEAD HAVING THERMALLY ASSISTED
RECORDING ELEMENT, AND METHOD OF FABRICATION THEREOF**

5 A perpendicular magnetic head including a media heating element that is fabricated within the magnetic head structure. The heating element is preferably fabricated above the first magnetic pole layer close to the ABS surface of the head. In one embodiment, following the fabrication of the heating element, a second magnetic pole probe layer that includes the second magnetic pole tip is fabricated. In an alternative head embodiment, a second magnetic pole
10 shaping layer is fabricated upon the heating element, followed by the fabrication of the probe layer that includes the second magnetic pole tip. The heating element is an electrically resistive heating element that is preferably comprised of NiCr or NiFe.